

**Amendments to the Drawings:**

The attached sheets of drawings include Replacement sheets for Figs. 1 and 2. These figures have been changed to include a legend designating the figures as “Prior Art.”

Attachment: Replacement Sheets

**REMARKS**

The application has been reviewed in light of the Office Action dated May 14, 2007. Claims 1-43 are pending in this application, with claims 1, 8, 9, 18, 21, and 33 being in independent form. By the present Amendment, claims 1, 9, 18, and 33-43 have been amended. It is submitted that no new matter has been added and no new issues have been raised by the present Amendment.

Figures 1 and 2 have been objected to for failing to include a legend designating the figures as "Prior Art." Accordingly, replacement sheets including the requested legend are attached to this Amendment.

Applicant acknowledges the Examiner's finding that claims 7 and 15 contain allowable subject matter.

Claims 8, 21, and 34 were rejected for containing alleged informalities. These claims have been amended hereby for the purposes of correcting the informalities.

Claim 33 was rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter, i.e. "stored codes." It is respectfully submitted that independent claim 33 is directed to a program storage device, and independent claim 33 has been amended to add greater clarity to the claim.

Claims 1, 3, 5, 6, 9, 11, 13, 14, 16, 18, 20, 22, 24, 25, 27, 29, 30, 31, 33, 35-41, and 43 were rejected under 35 U.S.C. §103(a) as allegedly obvious over the background of the Specification in view of U.S. Patent Application Publication No. 2003/0201932 ("Rabinowitz").

Applicant respectfully points out that Rabinowitz is incorrectly referred to in the Office Action as "US20030901932." Claims 2, 10, 19, and 34 were rejected under 35 U.S.C. §103(a) as allegedly obvious over the background of the Specification in view of Rabinowitz and further in view of U.S. Patent No. 6,259,401 ("Woo"). Claims 4, 12, 21, and 28 were rejected under 35 U.S.C. §103(a) as allegedly obvious over the background of the Specification in view of Rabinowitz and further in view of U.S. Patent No. 5,963,581 ("Fullerton"). Claims 8, 17, 23, 26, 32, and 42 were rejected under 35 U.S.C. §103(a) as allegedly obvious over the background of the Specification in view of Rabinowitz and further in view of U.S. Patent No. 6,888,879 ("Lennen"). Applicant has carefully considered the Examiner's comments and the cited art, and

respectfully submit independent claims 1, 9, 18, and 33 are patentably distinct from the cited art, for at least the following reasons.

Independent claims 1, 9, 18 and 33 each include the use of a digital filter for filtering the sampled I values and sampled Q values to modified I values and modified Q values. In these claims, the in-phase (I) and quadrature-phase (Q) are defined as **digital signals**. Accordingly, a digital filter is required to filter the sampled I and Q values in a meaningful way to produce modified I and Q values.

The Office Action concedes that the background fails to teach the use of a digital filter for filtering the sampled I values and sampled Q values to modified I values and modified Q values. However, the Office Action alleges that this feature is taught by Rabinowitz. In presenting this allegation, the Office Action points to the low pass filters 410I and 410Q shown in Fig. 7 and described in paragraph [0089]. However, as shown in Fig. 7 and described in paragraph [0089], the low pass filters of Rabinowitz are analog filters that filter “in-phase and quadrature baseband signals” (paragraph [0089]). The filters (410I and Q) are obviously analog in nature because they filter the signals prior to analog to digital conversion (ADC) (412) (see, for example, Fig. 7). Thus the filters of Rabinowitz filter analog baseband signals as opposed to the digital filters of the independent claims that filter digital I and Q values.

Accordingly, because the low pass filters of Rabinowitz are found prior to the analog-to-digital conversion, the low pass filters of Rabinowitz are not analogous to the digital filters of the independent claims, that are found downstream of the A to D conversion. The digital filters of the independent claims are thus in addition to any low pass filtering that may occur prior to the A to D conversion.

Moreover, the distinction between analog and digital filters is not trivial. In the independent claims, filtering the digital I and Q values provide modified I and Q values, that are described in the specification as a reduced data set that takes up less storage memory than the unmodified I and Q values (see, for example, paragraph [0040]). The reduced storage memory usage may then lead to a lower memory capacity requirement, reduced power consumption and/or reduced physical size.

However, filtering baseband signals using a low pass filter prior to analog-to-digital conversion will not generally result in a reduced data set. Accordingly, the analog low pass

filters of Rabinowitz fail to teach or suggest the use of a digital filter for filtering the sampled I values and sampled Q values to modified I values and modified Q values as claimed in the independent claims.

Moreover, the remainder of the cited art fails to teach or suggest the above claim elements, and the Office Action does not claim that they do. Accordingly, independent claims 1, 9, 18 and 33 are patentably distinct from the cited art for at least the above reasons. Dependent claims 2-8, 10-17, and 34-43 are patentably distinct from the cited art for at least the above reasons.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,



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Joseph B. Gross  
Reg. No. 57,109  
Attorney for Applicants

F. CHAU & ASSOCIATES, LLC  
130 Woodbury Road  
Woodbury, NY 11797  
Telephone: (516) 692-8888  
Facsimile: (516) 692-8889